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| APPLICATION NO.                          | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/938,430                               | 08/23/2001  | Douglas A. Cheline   | PD-201117           | 2585             |
| 20991                                    | 7590        | 10/07/2005           | EXAMINER            |                  |
| THE DIRECTV GROUP INC                    |             |                      |                     | REILLY, SEAN M   |
| PATENT DOCKET ADMINISTRATION RE/R11/A109 |             |                      |                     | ART UNIT         |
| P O BOX 956                              |             |                      |                     | PAPER NUMBER     |
| EL SEGUNDO, CA 90245-0956                |             |                      |                     | 2153             |

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|------------------------------|------------------------|---------------------|
|                              | 09/938,430             | CHELINE ET AL.      |
| Examiner                     | Art Unit               |                     |
| Sean Reilly                  | 2153                   |                     |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 22 August 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1,2,4-14 and 16-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 2,4,5,14,16 and 17 is/are allowed.

6)  Claim(s) 1,6-13 and 18-26 is/are rejected.

7)  Claim(s) 27 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All   b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

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**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_.  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

## **DETAILED ACTION**

A new Examiner has been assigned to this application.

This Office action is in response to Applicant's amendment and request for reconsideration filed on 8/22/2005. Claims 1-2, 4-14, and 16-27 are presented for further examination. While full faith and credit is given to the previous Examiner, after further search and consideration the following claims are no longer allowable: 6-9, 18-21, and 25-26.

### ***Priority***

1. No claim for priority was made.
2. The effective filing date for the subject matter defined in the pending claims in this application is 8/23/2001.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahura (U.S. Patent Publication No. 2003/0009592) and Bhatia et al. (U.S. Patent No. 6,108,330, hereinafter “Bhatia”) and “Windows 2000 DNS White Paper” by Microsoft, hereinafter Microsoft.

In considering claim 1, Stahura discloses a computer implemented method for resolving host names on a network comprising:

Receiving a host name query from a client (¶ 2, “browser submits a resolution request that specifies the domain name”);

Transmitting said host name query from the client to a DNS server (¶ 2); and

Returning a single address to said client computer (¶ 2, “IP address of the domain name [is returned] to the client computer”), where said single address is based on said host name query and any responses received from said DNS servers (it is the end result of the querying process, as described in ¶ 2).

However, Stahura does not disclose 1) that the client sends its queries and receives responses via a modem and 2) that the query is transmitted to a plurality of known Domain Name System (DNS) servers set up in the client.

With regard to point #1, Stahura does not disclose that the client sends its queries and receives responses via a modem because Stahura does not discuss the hardware of the client in any depth. Nonetheless, it is well known that clients can connect to DNS query services using a modem, as evidenced by Bhatia (Fig. 1). Thus, given the teaching of Bhatia, a person having ordinary skill in the art would have readily recognized the desirability and advantages of using a modem to connect the client taught by Stahura to the network, in order to allow users without direct connections to the Internet to use the system. Therefore, it would have been obvious to use a modem as taught by Bhatia, in the system taught by Stahura.

With regard to point #2, Stahura failed to disclose that the host name query is transmitted to a plurality of known Domain Name System (DNS) server set up in the client. Nevertheless it

was well known in the art at the time of the invention to send host name queries to a plurality of known DNS servers set up in the client, as evidenced by Microsoft. In an analogous art, Microsoft disclosed sending a DNS query to multiple DNS servers (pg 39, name resolution algorithm) wherein the list of DNS servers to query is known and setup in the system (i.e. stored on the system) (pg 38, lists of DNS servers for each adapter). Microsoft further disclosed that querying multiple DNS servers at once is necessary on disjoint networks for ensuring complete name resolution. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the DNS query algorithm as disclosed by Microsoft within the combined Stahura and Bhatia system, in order to ensure a complete name resolution.

In considering claim 10, Stahura further discloses prior to transmitting said host name query, searching a cache for an address associated with said host name query, and if located, returning a located address to said client, such that the client computer can send a request for content to said address (¶ 2, “the local domain name server checks a local cache to determine whether it has a mapping of that domain name IP address”).

In considering claim 11, the steps described in claim 11 essentially describe checking a client cache before making any host name query to a server, and returning content from the cache to the client computer if it has been stored in the cache (i.e. the language reads, “prior to transmitting said host name query, searching a cache based on said host name query, and if cached content associated with said host name query is located, returning said cached content to said client computer, such that said client can display said content”). Client-side caches are

notoriously well-known in the art, and would have been obvious to include in the Stahura system to avoid extra network traffic.

2. Claims 6-9 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahura and Bhatia et al. (U.S. Patent No. 6,108,330, hereinafter “Bhatia”) and Belfiore et al. (U.S. Patent Number 6, 009,459; hereinafter Belfiore).

In considering claims 6 and 25, Stahura disclosed a computer implemented method for resolving host names on a network, comprising:

Receiving a host name query from a client (¶ 2, “browser submits a resolution request that specifies the domain name”);

Transmitting said host name query from the client to a plurality of DNS servers (¶ 2, “the local domain name server... forwards the resolution request to a root domain name server,” and “the local domain name server then sends the resolution request to the top-level domain name server”); and

Returning a single address to said client computer (¶ 2, “IP address of the domain name [is returned] to the client computer”), where said single address is based on said host name query and any responses received from said DNS servers (it is the end result of the querying process, as described in ¶ 2)

Determining that a host has not been located by said DNS server (¶ 03);

However, Stahura does not disclose 1) that the client sends its queries and receives responses via a modem and 2) the a search is performed using said host name query as a search

string and transmitting a results address of where results of said search are located, to said client computer.

With regard to point #1, Stahura does not disclose that the client sends its queries and receives responses via a modem because Stahura does not discuss the hardware of the client in any depth. Nonetheless, it is well known that clients can connect to DNS query services using a modem, as evidenced by Bhatia (Fig. 1). Thus, given the teaching of Bhatia, a person having ordinary skill in the art would have readily recognized the desirability and advantages of using a modem to connect the client taught by Stahura to the network, in order to allow users without direct connections to the Internet to use the system. Therefore, it would have been obvious to use a modem as taught by Bhatia, in the system taught by Stahura.

With regard to point #2, such DNS search functionality was widely known in the art at the time of the invention, as evidenced by Belfiore. In an analogous art, Belfiore disclosed performing a host name query string search when a requested host name has not been located (Col 4, lines 20-29). The search results are then returned to the client (Col 6, lines 51-58). Belfiore further disclosed that the system allows users to access the content they intended to receive without added effort when URLs are typed incorrectly, are nonexistent, or are heavily used and can't be quickly resolved (Col 4, lines 14-29, 37-40). Thus, given the teaching of Belfiore, a person having ordinary skill in the art would have readily recognized the desirability and advantages of searching for host name queries as a search string when a host has not been located in the system taught by Stahura, in order to allow users to access the content they intended to receive without added effort when URLs are typed incorrectly, are nonexistent, or are heavily used and can't be quickly resolved.

With regard to claims 7 and 26, Belfiore disclosed sending further comprises sending said host name query as a search string to a search engine (Col 6, lines 35-48).

With regard to claims 8 and 9, Belfiore is silent as to whom (e.g. an ISP or administrator) actually selects the search engine used to perform host name query string searches. Nevertheless it was widely known in the art at the time of the invention for ISPs and administrators to configure client computers to access specific network resources, such as a default search engine. Thus, it would have been obvious for administrators or ISPs to select the search engine which performs the host name query string searches, in order to restrict queries to search engines they deem appropriate.

3. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahura, Bhatia, and Microsoft, and further in view of Poeluev.

In considering claims 12 and 24, although Stahura, Bhatia, and Microsoft fail to disclose a VPN, systems that allow client computers to query DNS servers via a VPN are well known, as evidenced by Poeluev (¶ 24). Given the teaching of Poeluev, a person having ordinary skill in the art would have readily recognized the desirability and advantages of using the Stahura system for VPN connections, to allow a user of the Stahura system to obtain access to public websites when connected to a VPN (see Poeluev, ¶ 5). Therefore, it would have been obvious for the network taught by Stahura and Bhatia to be a VPN, as taught by Poeluev.

4. Claims 13, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahura and “Windows 2000 DNS White Paper” by Microsoft, hereinafter Microsoft.

Claim 13 is rejected using the same rationale as applied to claim 1.

Claims 22-23 contain the same limitations as respective claims 10 and 11, and are thus rejected for the same reasons.

5. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahura and and Belfiore et al. (U.S. Patent Number 6, 009,459; hereinafter Belfiore).

Claims 18-21 are rejected using the same rationale as applied to claims 6-9.

#### *Response to Arguments*

6. Applicant’s arguments are noted however they are moot in view of the new grounds of rejection set forth.

#### *Allowable Subject Matter*

7. Claims 2, 4, 5, 14, 16, and 17 are allowed.
8. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose the features of claims 2, 4, 5, 14, 16, 17, and 27 describing in the context of the claimed domain name resolution system a step of determining that a plurality

of addresses were acquired from the DNS servers, and that all but one were eliminated according to specific criteria was not found in the prior art of record.

***Conclusion***

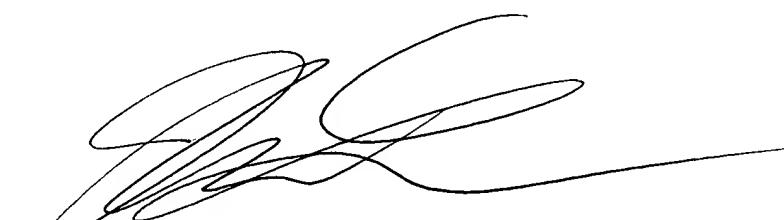
3. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.
4. This office action is made **NON-FINAL**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/21/2005



KRISNA LIM  
PRIMARY EXAMINER